

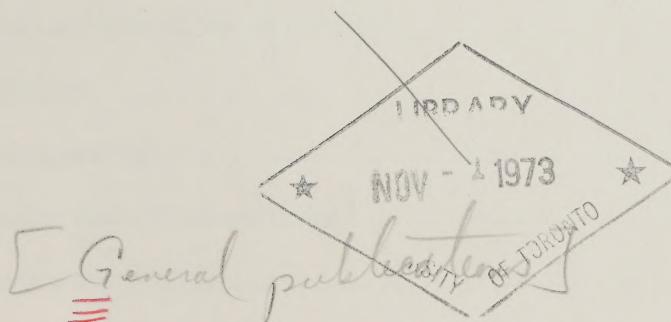
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# AGRICULTURAL CODE OF PRACTICE FOR ONTARIO



Ontario

Prepared by:

THE MINISTRY OF THE ENVIRONMENT  
AND  
THE MINISTRY OF AGRICULTURE AND FOOD

April, 1973

## ACKNOWLEDGMENTS

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gratefully acknowledge the contributions of many individuals and organizations.*

*Special credit should be given to Professor Tom Lane and Dr. John Rob-  
inson, Ontario Agricultural College, University of Guelph.*

# AGRICULTURAL CODE OF PRACTICE FOR ONTARIO

## CONTENTS

	page
Introduction .....	2
Purpose of the <i>Agricultural Code of Practice</i> .....	3
Recommended Procedure for Using the <i>Agricultural Code of Practice</i> .....	4
Requirements of the <i>Agricultural Code of Practice</i> .....	6
New and Existing Buildings and Production Facilities .....	6
Recommended Land Areas for Manure Utilization .....	7
Separation Distances .....	10
Manure Handling Systems .....	11
Manure Spreading During Winter and Spring .....	14
Dead Animal Disposal .....	15
Management Factors .....	16
Summary .....	16

## Introduction

Pollution is a matter of ever-increasing concern to all segments of our population. The problems created by pollution are usually complex and satisfactory solutions are difficult to achieve. Acceptable levels are hard to define and so, therefore, are proposals for pollution abatement.

Agriculture, like any other industry, must be aware of its contribution to the total pollution problem. Major areas of concern for agriculture are the odors and water-pollution potential associated with storage and utilization of animal manures.

Several factors have increased this concern recently.

- Significant increases in population have resulted in more people living closer together. This increase has also meant more urban people moving into a rural environment. Manure management on the farm affects all people living around that farm.
- There is an increasing trend toward more intensive livestock and poultry enterprises. Greater livestock numbers have not always been accompanied by comparable increases in acreages for manure utilization. More manure may be produced than can be used effectively in crop production and this surplus manure can create a disposal problem.
- The rapid growth in confinement rearing of livestock and poultry has not necessarily been accompanied by a parallel improvement in manure management methods. Certain manure systems may offer economic and labor advantages, but these advantages may be offset by increased problems of disagreeable odors. Further research is still required to reduce odor to an acceptable level.
- Some livestock and poultry enterprises have been established with little regard for neighboring residences and conversely some residential areas and individual homes have been allowed to develop in close proximity to existing livestock and poultry farms.

For all or many of these reasons, some serious odor and manure disposal problems have developed. Both the farmer and the nonfarming resident can be discomfited by the resulting air pollution.

It should be recognized that not all livestock and poultry operations present significant pollution cases. The pollution potential depends on the system of manure management and the overall farm management.

Until better manure management methods and manure treatment devices are developed, there are several key measures, which, if adopted, can minimize pollution problems. These include provision of:

1. sufficient land area on which to spread the manure
2. sufficient manure storage capacity to hold the manure until it can be properly spread on the land at appropriate times
3. sufficient separation distances from livestock and poultry buildings and manure storages to neighboring dwellings
4. management guidance in keeping with existing knowledge on the storage, handling and use of animal manures
5. guidance for dead animal disposal.

During recent years, agriculture has demonstrated that, generally, it has been adopting a responsible and farsighted approach to these pollution problems. This has been brought about by the cooperation of individual farmers, farm organizations, municipal councils, the provincial government and agribusiness. Continuing application of this basic philosophy is required if agriculture is to meet its responsibility in the future.

The Environmental Protection Act, 1971, and its amendments were passed to provide a substantial measure of protection against all forms of pollution including offensive odors. This Act is administered by the Ontario Ministry of the Environment.

As a basis for cooperative action, this *Agricultural Code of Practice* has been developed in the form of guidelines which, when followed, should provide a reasonable, fair and satisfactory way of dealing with pollution problems. It is not intended that the contents of the *Agricultural Code* be adopted literally into legislation at any level of government.

#### **PURPOSE OF THE AGRICULTURAL CODE OF PRACTICE**

In the application of this *Code*, there are several points which should be clearly understood so that the *Code* can be translated into effective and reasonable farm practices and pollution control systems.

The purpose of the *Code* is:

to serve as a basis for assessing adequacy of design and operation of livestock and poultry farms with respect to pollution control.

to assist farmers in avoiding undesirable situations which could lead to legal disputes concerning pollution. Experience has indicated that farms operating within the *Agricultural Code of Practice* rarely create environmental problems and that legal action is seldom warranted. Farms operating within the provisions of the *Agricultural Code of Practice* may expect substantial support in the event of future environmental disputes.

to supply guidelines for the design of

- (a) new livestock and poultry enterprises
- (b) major renovations or expansion of existing facilities.

to serve as a basis for assessing existing livestock and poultry operations which do not contemplate change, or

to serve as a basis for the preparation of a comprehensive plan of farm operation with specific emphasis on manure management.

to be flexible enough in interpretation and application to cover special cases without being overly restrictive.

## **RECOMMENDED PROCEDURE FOR USING THE AGRICULTURAL CODE OF PRACTICE**

### **A. Use in the farm community**

1. (a) Based on the *Code*, Agricultural Engineers of the Ontario Ministry of Agriculture and Food are prepared to advise farmers on the design and layout of proposed new buildings, as well as renovations or expansion of existing facilities. Farmers are encouraged to take advantage of this advisory and planning service.
- (b) The Ontario Ministry of Agriculture and Food is also prepared to advise farmers who desire to bring their existing operations into compliance with the *Code*.

2. Farmers are strongly encouraged to apply for a *Certificate of Compliance* from the Ontario Ministry of the Environment before commencing construction. Application forms are available at County and District Offices of the Ontario Ministry of Agriculture and Food as well as at the District Offices of the Ontario Ministry of the Environment. A list of offices is given on pages 18 and 19.

A Certificate of Compliance is issued to all farmers whose premises and management practices are consistent with the requirements of the *Agricultural Code of Practice*. The continued validity of the Certificate is dependent upon fulfilment of the conditions specified in the Certificate and the implementation of the management practices recommended in the *Agricultural Code of Practice*.

3. The *Agricultural Code of Practice* will be used as a basis for assessing applications for a Certificate of Compliance. The guidelines will be interpreted with enough flexibility to allow for acceptance of alternative disposal methods. All applications will be received and assessed jointly by the Ministries of the Environment and Agriculture and Food.
4. The provisions of the *Code of Practice* apply to all sizes of livestock and poultry operations.
5. All complaints regarding pollution should be directed to the Ontario Ministry of the Environment.
6. Farmers with potential or existing pollution problems are encouraged to make use of the extension services of the Ontario Ministry of Agriculture and Food.

#### **B. Use by Municipal Councils**

Since Agricultural technology is changing rapidly, the *Agricultural Code of Practice* will be updated regularly as agricultural conditions change and, therefore, should not be adopted literally into legislation.

1. When municipal councils are considering land use planning or zoning changes, they are encouraged to consult with extension personnel of the Ontario Ministry of Agriculture and Food and to investigate all possible techniques to safeguard good agricultural operations. This consultation will involve the proper use and application of the *Agricultural Code of Practice*.

2. Municipal councils will be advised by the Ministry of the Environment of the names of farmers in their area who have received a Certificate of Compliance.
3. One of the significant factors in assessing an application for a Certificate of Compliance is the provision by the farmer of an adequate buffer zone between his livestock production unit and neighboring dwellings or other noncompatible land uses. Any interference with this buffer zone by subsequent land use changes will result in serious complications for continued agricultural use of that land.

The *Agricultural Code of Practice* suggests that municipal councils have a direct responsibility to maintain this buffer zone.

- Councils should require a Certificate of Compliance from all farmers erecting or enlarging livestock or poultry buildings.
- When considering applications for building permits, land severances, rezoning or any noncompatible use (for example private dwellings, recreational, commercial, etc.,) in an agricultural area, Councils should ensure that the building will not restrict the operation of established livestock or poultry facilities holding a Certificate of Compliance.

## REQUIREMENTS OF THE AGRICULTURAL CODE OF PRACTICE

### A. NEW AND EXISTING BUILDINGS AND PRODUCTION FACILITIES

#### 1. *New Buildings*

All the requirements of the *Code* apply to new livestock and poultry units.

#### 2. *Renovation and Expansion of Existing Facilities*

All the requirements of this *Agricultural Code* apply to changes of existing facilities.

If the expansion involves a new structure, which is entirely separated from existing buildings, every attempt should be made to locate within the distance requirements of the *Agricultural Code*. However, if this is not practical or possible, then alternative arrangements should be discussed with the Agricultural Engineer to see if they compensate sufficiently for shortages in distance. Barn extensions also fit into this category.

### 3. Existing Livestock and Poultry Operations Not Contemplating Remodeling or Expansion

Any farmer wishing to apply for a Certificate of Compliance can do so and the farm will be assessed according to the requirements of the *Code*; all the requirements apply. Again, existing shortages may be compensated for by satisfactory alternatives but these should be discussed with the Agricultural Engineer.

## B. RECOMMENDED LAND AREAS FOR MANURE UTILIZATION

This *Agricultural Code* is based on the concept that all manure should be returned to the land to grow more crops. Land has the ability to accept a reasonable amount of manure without creating problems. However, it must be emphasized that land can safely accept only so much manure without increasing the potential for water pollution. Further research may suggest alternative methods of manure utilization and disposal.

This *Code* recognizes that there is considerable variation in manure quantity and quality due to type of livestock, type of feed and type of manure system used. Farmers are encouraged to have an analysis of the manure made at the University of Guelph. With this information, more specific answers on manure utilization can be given.

### Explanation of Tables I and II

The following tables have been established with due regard to the pollution potential of phosphorus, potash and particularly the nitrogen content of manure. The movement of nitrogen in the soil is of great concern and was a prime consideration in the development of these tables.

1. The Animal Unit System equates different types of livestock and poultry according to the pollution potential of the manure. The number of animal units can be determined from Table I. This number is transferred to Table II to find the minimum acreage required to minimize pollution.
2. Recommended acreages refer to land in crop production that can be used for spreading of manure.
3. Acreages shown are the minimum necessary to avoid pollution, not necessarily the most economical for crop production. When more efficient use of manure is required, greater acreages should be considered. The Ontario Ministry of Agriculture and Food can provide information on this subject; the best information can be given about manure which has been analyzed, also taking into account such factors as soil type and crops.

4. Minimum acreages are those required to avoid the risk of groundwater pollution by compounds of nitrogen.
5. All calculations for animal units should be based on total livestock numbers for the complete year.
6. For new livestock and poultry operations, a minimum of 40 acres at the farm site is strongly recommended. On acreages less than 40 acres, distance requirements are difficult to meet and compensatory alternatives will have to be considered. These include such items as converting to dry manure, no outside manure storage or manure storage at another site. Alternatives should be checked by the Agricultural Engineer of the Ontario Ministry of Agriculture and Food.
7. Manure may be spread on leased land or on a neighboring farm. However, consideration must be given to a satisfactory agreement with the neighbor

**TABLE I ANIMAL UNITS OF PRODUCTION AS BASIS FOR ACREAGE REQUIREMENTS**

Type of Livestock or Poultry	Annual Basis (365 Days)
1 dairy cow (plus calf) .....	1 animal unit
1 beef cow (plus calf) .....	1 animal unit
1 bull .....	1 animal unit
1 horse .....	1 animal unit
4 sheep (plus lambs) .....	1 animal unit
4 sows (plus litter to weaning) .....	1 animal unit
125 laying hens .....	1 animal unit
100 female mink (plus associated males & kits) .....	1 animal unit
<b>Market Basis (as marketed)</b>	
2 beef feeders (gain 400-1100 lb) .....	1 animal unit
4 beef feeders (gain 400-750 lb) .....	1 animal unit
4 beef feeders (gain 750-1100 lb) .....	1 animal unit
15 hogs (gain 40-200 lb) .....	1 animal unit
1000 broiler chickens or roasters (4-5 lb) .....	1 animal unit
300 turkey broilers (11-12 lb) .....	1 animal unit
150 heavy turkey hens (19-20 lb) .....	1 animal unit
100 heavy turkey toms (30-32 lb) .....	1 animal unit
40 veal calves (gain 90-300 lb) .....	1 animal unit
300 pullets .....	1 animal unit

to receive this manure on a continuing basis and at specific times during the year.

8. Complete design information is not given in this Code. The following publications are suggested for resource information on design:

*Canadian Code for Farm Buildings, 1970*

*Livestock Waste Management and Pollution Abatement, 1971 - A.S.A.E.*

*Canada Animal Waste Management Guide, 1972*

**TABLE II MINIMUM ACREAGE FOR LIVESTOCK OR POULTRY  
MANURE UTILIZATION**

Number of Animal Units	Loam to Clay Soil	Sandy Soil
30 - 40 animal units	20 acres	30 acres
41 - 60 animal units	30 acres	45 acres
61 - 80 animal units	40 acres	60 acres
81 - 100 animal units	50 acres	75 acres
101 - 120 animal units	60 acres	90 acres
121 - 140 animal units	70 acres	105 acres
141 - 160 animal units	80 acres	120 acres
161 - 180 animal units	90 acres	135 acres
181 - 200 animal units	100 acres	150 acres
201 - 220 animal units	110 acres	165 acres
221 - 240 animal units	120 acres	180 acres
241 - 260 animal units	130 acres	195 acres
261 - 280 animal units	140 acres	210 acres
281 - 300 animal units	150 acres	225 acres
301 - 320 animal units	160 acres	240 acres
321 - 340 animal units	170 acres	255 acres
341 - 360 animal units	180 acres	270 acres
361 - 380 animal units	190 acres	285 acres
381 - 400 animal units	200 acres	300 acres

*Sample Problem:* A farmer on loam soil proposes to build a new hog feeder barn to house 600 hogs at one time. Annual marketings will be approximately 1500 hogs.

*Solution:* Refer to Table I.

$$1500 \text{ hogs} = \frac{1500}{15} = 100 \text{ animal units}$$

Refer to Table II.

100 animal units require 50 acres of crop land on which to spread the manure.

## C. SEPARATION DISTANCES

The objectionable effect of odors in a neighborhood can be reduced if livestock and poultry facilities are located as far as is practically possible from neighboring dwellings. A decision about separation distances can be made only once – when a new building is erected. Therefore, careful planning is necessary to accommodate both present and future requirements.

The intensity of odor from the building and the manure storage relates closely to separation distance. Odor intensity is affected by type of livestock or poultry, feeding program, moisture content of the manure and atmospheric conditions. It is difficult to obtain a realistic odor level measurement.

Distances suggested below are for *untreated* manure. When satisfactory aeration or treatment devices are installed, these distances may be reduced. Special consideration will be given to reducing distances for systems using dry manure.

*Proper site planning now can reduce potential problems in future.*

### Distance Requirements

See sketch on page 17.

(a) *New livestock and poultry buildings and manure storage facilities should be:*

1. at least 2000 feet from land presently zoned for residential use
2. at least 1000 feet from dwelling on adjacent property
3. at least 300 feet from the center line of any public road
4. at least 200 feet from the lot lines of the site on which the production unit is situated.

(b) *Major renovations or enlargement of existing facilities*

The same distances apply as in section (a). Consideration will be given to such factors as existing building location and the need to centralize the operation. In certain cases, it may be possible to receive a Certificate of Compliance for the expansion but not for the existing facilities.

## **D. MANURE HANDLING SYSTEMS**

It is extremely important that careful planning and sound management be applied to the operation of manure handling systems. The design of the manure system is as important as the design of the building. Farmers are encouraged to seek advice from their Agricultural Engineer before deciding on any design. There are no cheap or low-cost manure systems. All manure storages should be designed and located to protect water wells from contamination.

The following restrictions do not apply to dry, relatively non-odorous, well-rotted manure applied as a mulch and fertilizer at the base of fruit trees or to manure that has been aerated sufficiently to reduce odors to an acceptable level.

### **Solid Manure System**

For handling solid manure, the requirements are:

1. Unless solid manure can be incorporated within 24 hours, or sooner when necessary, it should not be spread closer than 600 feet from a neighbor's house.
2. Solid manure storages should be designed and managed to keep pollution problems to a minimum. The manure should be kept as dry as possible. This means keeping rainfall from the storage. All liquid effluent containing manure *must* be contained at the site by dykes or retaining walls. *Under no conditions* can this liquid effluent be allowed to get into streams or watercourses.
3. Sufficient storage capacity for six months' accumulation of manure should be provided.
4. Feedlots and paved yards should be designed to retain near the site all liquid effluent containing manure. The following procedures should minimize volume of effluent:
  - Install eavestroughs on all barns to keep roof water from yards.
  - Divert all outside drainage away from feedlot by dykes, ditches or drains.
  - Keep yards as clean as possible to reduce the amount of manure carried by runoff waters.
  - Consider roofing-in a portion of the lot to keep out rainfall.
5. Where possible, manure should be spread while wind conditions are favorable to direct odors away from nearby receptors.

## Liquid Manure System

If a liquid manure system is to be used, the requirements are:

1. Sufficient storage capacity for at least 6 months' accumulation of manure should be provided. Any deviation from this requirement will be evaluated by the Agricultural Engineer of the Ministry of Agriculture and Food, considering such factors as geographic area, climate and cropping program.
2. Where untreated liquid manure is spread on land within 1000 feet of neighboring dwellings, *it must be incorporated into the soil as soon as possible*, certainly within 24 hours. The timing requirement depends on a number of factors such as weather conditions, actual distance to neighbors and intensity of odor.

Incorporation can be accomplished by:

- (a) plow-down
- (b) discing or
- (c) a liquid manure injection attachment.

The liquid manure must be *completely* covered by the soil and not left in open furrows.

3. Due consideration should be given to potential odor problems when spreading liquid manure.
  - Complete spreading of manure in as short a period as possible in order not to prolong the production of odors.
  - Take advantage of climatic and atmospheric conditions when spreading.
4. It is extremely important that everyone appreciate the potential hazards of liquid manure storage.
  - All liquid in-ground storages must be protected by a permanent top or at least a safety fence.
  - Liquid manure that has not been aerated generates gases such as methane, hydrogen sulfide, ammonia and carbon dioxide. Concentrations of these gases can present a hazard to both human and animal life. *Good ventilation of buildings and tanks is a must when pumping.* Never enter a liquid manure tank unless you are sure there is sufficient oxygen and unless you have a helper outside the tank.

5. It is important to recognize all possible hazards of storing liquid manure in excavated ponds with earth sides. These are:
  - erosion of banks by rainfall and during agitation of liquids.
  - the necessity for safety precautions such as construction of safety fences and an adequate pumping platform.
  - ground and surface water pollution potential if soil is not impermeable.

### **Manure Lagoons**

For purposes of the *Code of Practice*, a lagoon is defined as a liquid manure storage facility in an excavated area with earth sides or dykes, designed to provide some treatment for the manure.

Not very many lagoons on farms in Ontario have been successful. The design of a lagoon is critical and should be done by competent designers. Typical problems with lagoons have included:

- improper design
- odor production
- improper sealing
- undesirable aesthetics
- lack of a safety fence.

There are two basic types of lagoons:

#### *Aerobic Lagoons*

A lagoon may be aerobic because there is sufficient surface area or because aeration devices have been installed. It is acceptable from the point of view of pollution but usually unacceptable because of cost.

#### *Anaerobic Lagoons*

Anaerobic bacterial activity reduces solids but results in the production of foul smelling gases such as hydrogen sulfide. Anaerobic lagoons are generally not acceptable, except in very isolated areas.

## **E. MANURE SPREADING DURING WINTER AND SPRING**

All farmers should be particularly concerned about the pollution potential of indiscriminate spreading of manure. The greatest fertility value for manure is realized when manure is stored properly and incorporated into the soil after spreading. This practice reduces odor problems and guards against runoff.

There are two main causes of runoff:

1. melting snow or heavy rain washing the manure downhill into streams, watercourses, or tile catch basins.
2. spreading manure too close to a stream or watercourse.

*Losses of manure due to runoff* depend upon such factors as:

- whether the ground is frozen and/or snow-covered
- the slope of the land
- the amount and type of crop cover
- the soil type
- the amount of rainfall.

Since many factors may influence the amount of runoff, the decision on where and when to spread should be wisely made. Experience will indicate which fields are subject to runoff and these fields should be left until the spring melt has taken place. Relatively flat fields, not subject to runoff or flooding problems, should be chosen for winter or early spring spreading. When manure must be piled for future spreading, sites should be selected that are reasonably level, away from watercourses and not subject to flooding.

The importance of a properly constructed storage facility with at least 6 months' capacity cannot be overemphasized for the proper handling of manure during winter months. This capacity allows the farmer to spread manure when and where it is most beneficial for crop production and is less apt to create a pollution problem.

## F. DEAD ANIMAL DISPOSAL

Facilities for dead animal disposal must be properly designed and operated. There are five basic systems in use in Ontario.

1. *Pickup by a licensed dead stock carrier.* This service is available for large animals but is not always provided for small animals and poultry.
2. *Storage of small animals or poultry in a freezer* until numbers are sufficient for pickup by a rendering plant.
3. *Disposal site on your own farm.* There are basically two types available:
  - (a) *Disposal Pit*  
The pit should be covered with a tight-fitting lid and locking device. It should be located at least 150 feet from any well or spring. Size requirements are: Broilers — 20 cu ft/1000 birds  
Layers — 100 cu ft/1000 birds
  - (b) *Temporary trenches or pits* (for summer use only)  
Earth is backfilled over the birds each time additions are made. At least two feet of soil should be placed over the birds.
4. *Sanitary land-fill site.*
5. *Incineration.* Dead animals can be suitably disposed of in properly designed incinerators. A Certificate of Approval must first be obtained from the Air Management Branch for each installation. Such approval is required under the provision of the Environmental Protection Act, 1971 and amendments thereto. Application forms and copies of the Act are available at Air Management Branch district offices (listed on page 19).

A properly designed incinerator will provide sufficient capacity and ensure that resulting emissions are within standards set by the legislation. In order to incinerate dead animals, the unit will normally require two burners which operate with gas or No. 2 fuel oil.

The most common problems with improperly designed units are smoke and odor emission.

**THE DISPOSAL OF DEAD ANIMALS BY OPEN BURNING IS COMPLETELY UNACCEPTABLE.**

## **G. MANAGEMENT FACTORS**

It should be emphasized that the farmer should take advantage of all local conditions to minimize pollution. The need for good public relations cannot be overemphasized. Manure should be spread where it will cause least inconvenience or nuisance to everyone concerned.

Proper equipment, capable of avoiding spillage or leakage during transport, is a must when using public roads. Again, emphasis should be placed on taking advantage of weather conditions.

Good sanitation and fly control around buildings and manure storages are a necessity. General farmstead appearance can have a bearing on the attitude of the community. Visual screening of exposed manure storages is well worth considering.

Reduction of odor levels can also be accomplished by the proper design and use of a ventilation system in the buildings. In-house drying of manure should be considered to keep odor levels acceptable.

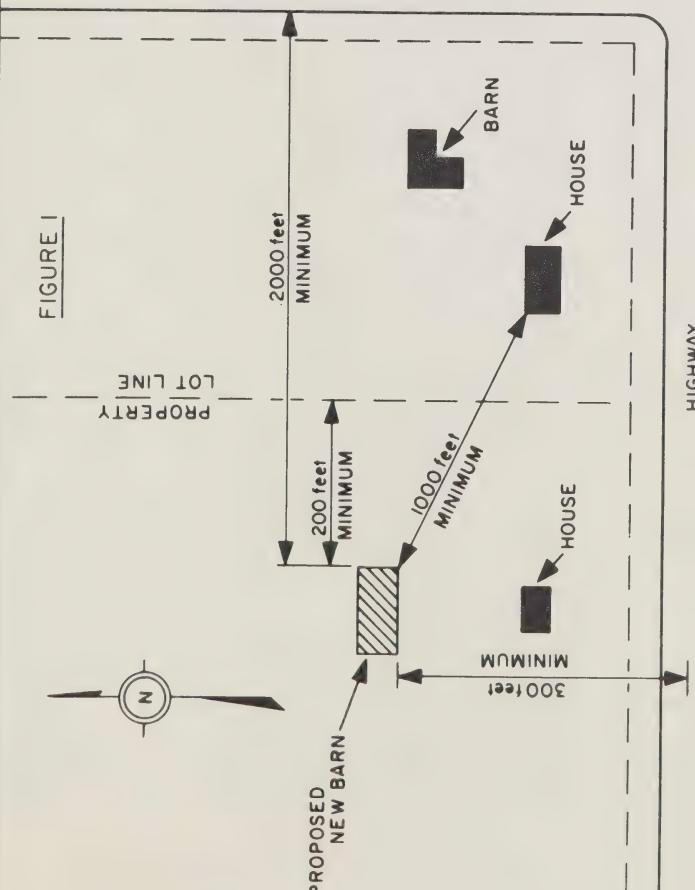
The local climate and topographic conditions on the site should also be considered when choosing a site for new facilities and designing the ventilation layout.

## **Summary**

Adoption of the requirements in this *Code of Practice*, together with careful planning, good manure management practices, and consideration for the rights of everyone, should considerably reduce the risk of pollution problems in the future. Previous experience with the *Code of Practice* has demonstrated that this combination is effective in maintaining an acceptable environment.

Before beginning construction, the owner should ensure that the requirements of all authorities have been satisfied.

FIGURE 1



SKETCH SHOWING  
**MINIMUM DISTANCE REQUIREMENTS**  
FROM OTHER DWELLINGS, ROADS, ETC.

NOT TO SCALE

W.J.C. '70

**COUNTY AND DISTRICT OFFICES**  
**MINISTRY OF AGRICULTURE AND FOOD**

ALGOMA	1496 Wellington St. E., SAULT STE. MARIE	253-1941
BRANT	207 Greenwich St., BRANTFORD W3S 2X7	759-4190
BRUCE	Box 1330, WALKERTON	881-3301
CARLETON	26 Thorcliffe Pl., OTTAWA K2H 6L2	828-9167
COCHRANE N.	Experimental Farm, KAPUSKASING	335-5828
COCHRANE S.	MATHESON	273-2509
DUFFERIN	Box 100, ORANGEVILLE	941-3830
DUNDAS	Box 488, WINCHESTER K0C 2K0	774-2313
DURHAM	234 King St. E., BOWMANVILLE	623-3348
ELGIN	594 Talbot St., ST THOMAS	631-4700
ESSEX	ESSEX	776-7361
FRONTENAC	Box 651, KINGSTON	544-1995
GLENGARRY	Box 579, ALEXANDRIA	525-1046
GRENVILLE	Box 2004, KEMPTVILLE	258-3411
GREY	181 Toronto St. S., MARKDALE	986-2040
HALDIMAND	CAYUGA	772-3381
HALTON	181 Main St., MILTON	878-2314
HASTINGS	Box 340, STIRLING	395-3393
HURON	Box 159, CLINTON	482-3428
KENORA	70 Van Horne Ave., DRYDEN	223-2415
KENT	P.O. Box 726, CHATHAM	354-2150
LAMBTON	Box 730, PETROLIA	882-0180
LANARK	10 Sunset Blvd., PERTH K7H 2Y2	267-1063
LEEDS	Box 635, BROCKVILLE K6V 5V8	342-2124
LENNOX AND ADDINGTON	Box 1600, NAPANEE	354-3371
MANITOULIN	GORE BAY	282-2043
MIDDLESEX	195 Dufferin Ave., LONDON M6A 1K7	434-6811
MUSKOKA	Box 130, HUNTSVILLE	789-5491
NIAGARA N.	VINELAND STATION L0R 2E0	562-4142
NIAGARA S.	574 South Pelham St., WELLAND L3C 3C6	732-7552
NIPISSING	222 McIntyre St. W., NORTH BAY	474-3050
NORFOLK	19 Kent St. S., SIMCOE	426-0680
NORTHUMBERLAND	Box 820, BRIGHTON	475-1630
ONTARIO	Box 309, UXBRIDGE	852-3132
OXFORD	Box 666, 954 Dundas St. E., WOODSTOCK	537-6621
PARRY SOUND	Box 130, HUNTSVILLE	789-5491
PEEL	3 Elizabeth St. S., BRAMPTON L6Y 1P7	451-5474
PERTH	Box 398, 478 Huron St., STRATFORD	271-0280
PETERBOROUGH	55 George St. N., PETERBOROUGH K9J 3G2	745-2403
PREScott	Box 110, PLANTAGENET	673-5115
PRINCE EDWARD	Box 470, PICTON	476-3224
RAINY RIVER	Box 210, Front St., EMO POW 1E0	482-2310
RENFREW	315 Raglan St. S., RENFREW K7V 1R6	432-4841
RUSSELL	Box 280, ROCKLAND	762-5106
SIMCOE N.	Box 340, ELMVALE	322-2231
SIMCOE S.	Box 370, ALLISTON	435-5521
STORMONT	Box 655, 109-11th St. W., CORNWALL	933-1581
SUDBURY	1414 La Salle Blvd., SUDBURY	566-1630
TIMISKAMING	Box "G", NEW LISKEARD	647-6701
THUNDER BAY	Box 958, Postal Station P., THUNDER BAY	345-1472
VICTORIA	322 Kent St. W., LINDSAY	324-6121
WATERLOO	824 King St. W., KITCHENER	744-5294
WELLINGTON	Box 370, ARTHUR NOG 1A0	848-2447
WENTWORTH	R.R. 1, ANCASTER L9G 3K9	527-2995
YORK	Newmarket Plaza, NEWMARKET	895-4519

**AIR MANAGEMENT BRANCH DISTRICT OFFICES**  
**MINISTRY OF THE ENVIRONMENT**

ALGOMA	765 Barry Downe Rd., SUDBURY	566-7590
BRANT	1083 Barton St. E., HAMILTON	547-9621
BRUCE	98 Bayfield St., BARRIE	726-1730
CARLETON	2378 Holly Lane, OTTAWA K1V 7P1	731-9944
COCHRANE	694 Cassells St., NORTH BAY	474-3512
DUFFERIN	98 Bayfield St., BARRIE	726-1730
DUNDAS	2378 Holly Lane, OTTAWA K1V 7P1	731-9944
DURHAM	139 George St., PETERBOROUGH K9J 2T0	745-4601
ELGIN	362 Dundas St. E., LONDON N6B 1V8	673-1230
ESSEX	1922 Wyandotte St. E., WINDSOR N8Y 1E4	253-4615
FRONTENAC	797 Princess St., KINGSTON K7L 1G1	546-5564
GLENGARRY	2378 Holly Lane, OTTAWA K1V 7P1	731-9944
GRENVILLE	797 Princess St., KINGSTON K7L 1G1	546-5564
GREY	98 Bayfield St., BARRIE	726-1730
HALDIMAND	28 East Main St., WELLAND	735-0431
HALTON	125 Cross St., Oak Queen Mall, OAKVILLE	822-2566
HASTINGS	139 George St., PETERBOROUGH K9J 2T0	745-4601
HURON	279 Weber St. N., WATERLOO	884-2920
KENORA	1111 Victoria Ave., THUNDER BAY	622-3997
KENT	1922 Wyandotte St. E., WINDSOR N8Y 1E4	253-4615
LAMBTON	560 Exmouth St., SARNIA	344-7409
LANARK	797 Princess St., KINGSTON K7L 1G1	546-5564
LEEDS	797 Princess St., KINGSTON K7L 1G1	546-5564
LENNOX and ADDINGTON	797 Princess St., KINGSTON K7L 1G1	546-5564
MANITOULIN	765 Barry Downe Rd., SUDBURY	566-7590
MIDDLESEX	362 Dundas St. E., LONDON N6B 1V8	673-1230
MUSKOKA	98 Bayfield St., BARRIE	726-1730
NIAGARA	28 East Main St., WELLAND	735-0431
NIPISSING	649 Cassells St., NORTH BAY	474-3512
NORFOLK	362 Dundas St. E., LONDON N6B 1V8	434-4545
NORTHUMBERLAND	139 George St., PETERBOROUGH K9J 2T0	745-4601
ONTARIO	880 Bay St., TORONTO 181	965-1971
OXFORD	Suite 601, 362 Dundas St. E., LONDON N6B 1V8	673-1230
PARRY SOUND	649 Cassells St., NORTH BAY	474-3512
PEEL	125 Cross St., Oak Queen Mall, OAKVILLE	822-2566
PERTH	279 Weber St. N., WATERLOO	884-2920
PETERBOROUGH	139 George St., PETERBOROUGH K9J 2T0	745-4601
PREScott	2378 Holly Lane, OTTAWA K1V 7P1	731-9944
PRINCE EDWARD	797 Princess St., KINGSTON K7L 1G1	546-5564
RAINY RIVER	1111 Victoria Ave., THUNDER BAY	622-3997
RENFREW	2378 Holly Lane, OTTAWA K1V 7P1	731-9944
RUSSELL	2378 Holly Lane, OTTAWA K1V 7P1	731-9944
SIMCOE	98 Bayfield St., BARRIE	726-1730
STORMONT	2378 Holly Lane, OTTAWA K1V 7P1	731-9944
SUDBURY	765 Barry Downe Rd., SUDBURY	566-7590
TIMISKAMING	649 Cassells St., NORTH BAY	474-3512
THUNDER BAY	1111 Victoria Ave., THUNDER BAY	622-3997
VICTORIA	139 George St., PETERBOROUGH K9J 2T0	745-4601
WATERLOO	279 Weber St., WATERLOO	884-2920
WELLINGTON	279 Weber St., WATERLOO	884-2920
WENTWORTH	1083 Barton St. E., HAMILTON	547-9621
YORK	880 Bay St., TORONTO 181	965-1971

— NOTES —



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